

REMARKS

Claims 1-10 were presented for examination in the present application. The instant amendment adds new claims 22-31 without prejudice. Thus, claims 1-10 and 22-31 remain pending upon entry of the instant amendment. Claims 1, 10, and 22 are independent.

Independent claims 1 and 10, as well as dependent claims 2-9, were rejected under 35 U.S.C. §103(a) over Japanese Publication No. 11-157939 to Hirao et al. (Hirao) in view of U.S. Publication No. 2002/0106611 to Bhaduri et al. (Bhaduri).

Applicants respectfully maintain the traversal of these rejections.

More particularly, Applicants maintain that the Office Action has misapplied teachings of Hirao. Hirao is directed to a low temperature sintering adjuvant for silicone nitride. As such, Hirao does not disclose or suggest a sintering vessel, but rather discloses the mixture of silicone nitride with aluminum oxide or other sintering aids. Thus, Hirao discloses the materials that are to be sintered, but not the vessel that holds these materials. In fact, Hirao is completely silent as to what vessel, if any, holds its sintering materials during the microwave process.

In contrast to the teaching of Hirao, independent claim 1 recites, in part, that the materials to be sintered are “arranged in a vessel” and that “besides being built from primary materials for the structure of the vessel, the vessel is built from a secondary material (emphasis added)”. Further, claim 1 recites the step of “introducing, via said microwaves, sintering energy into the materials”.

Thus, claim 1 requires the step of introducing sintering energy into the materials, where the materials are arranged in a vessel that is built from primary materials and a secondary material. Applicants maintain that the Office Action has failed to make a *prima facie* case of obviousness of claim 1 over the proposed combination of Hirao and Bhaduir.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). More particularly, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art. *Id.*; *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

In contrast to the claimed vessel made of primary and secondary materials, Hirao merely discloses a material to be sintered that is made of a primary material and a secondary material. However, these materials, before sintering do not form a vessel and clearly do not have materials to be sintered “arranged” therein.

Clearly, the sinter material of Hirao does not disclose or suggest the vessel of claim 1. As such, Applicants submit that the Office Action has failed to meet the burden of establishing that all elements of claim 1 are disclosed by Hirao.

Further, Bhaduri is merely asserted by the Office Action as disclosing microwave sintering of dental parts at particular frequencies. As such, Applicants also submit that the Office Action has failed to meet the burden of establishing that all elements of claim 1, namely materials that to be sintered “being arranged in a vessel” where “besides being built from primary materials for the structure of the vessel, the vessel is built from a secondary material”, are disclosed by Hirao alone or in combination with Bhaduri.

Thus, the Office Action has failed to make a *prima facie* case that the cited art, alone or in combination, discloses or suggests the claimed method of introducing sintering energy into the materials, where the materials are arranged in a vessel that is built from primary materials and a secondary material.

Accordingly, claim 1 is not disclosed or suggested by the cited art. Claim 1, as well as claims 2-9 that depend therefrom, are therefore believed to be in condition for allowance over the cited art. Reconsideration and withdrawal of the rejection to claims

1-9 are respectfully requested.

Independent claim 10 recites “ceramic masses that are to be sintered being arranged in a vessel” and that “besides being built from primary materials for the structure of the vessel, the vessel is built from a secondary material” (emphasis added). Further, claim 10 recites the step of “introducing, via said microwaves, sintering energy into said ceramic masses to be sintered”.

Thus, claim 10, similar to claim 1 discussed in detail above, requires the step of introducing sintering energy into ceramic masses to be sintered, where the ceramic masses are arranged in a vessel that is built from primary materials and a secondary material.

For at least the reasons discussed above with respect to claim 1, Applicants respectfully submit that the Office Action has failed to make a *prima facie* case that the proposed combination of Hirao and Bhaduri discloses or suggests the method recited by claim 10.

Accordingly, claim 10 is not disclosed or suggested by the cited art. Claim 10 is therefore believed to be in condition for allowance over the cited art. Reconsideration and withdrawal of the rejection to claim 10 are respectfully requested.

Claims 22-31 have been added to point out various aspects of the present application. It is submitted that new claims 22-31 are directed to the elected method. Support for new claims 22-31 can be found in the specification at least at page 7, line 6 through page 8, line 15, as well as in original claims 1-21. No new matter is added.

Applicants specifically point out that new claims 22-31 are no intended to be limited to the specific mechanisms of patentability previously argued with respect to any prior claims in this or any related applications. Accordingly, Applicants hereby rescind any disclaimer of claim scope and, thus, any prior art for which such a disclaimer was

made to avoid may need to be revisited by the Examiner with respect to new claims 22-31.

Claims 22-31 are in a condition for allowance. For example, claim 22 recites, in part, the steps of "assembling a bottom element, an intermediate element, and a top element to define a receiving portion, the bottom, intermediate, and top elements being formed from a primary material", "introducing a secondary material into an annular recess of the intermediate element so that the secondary material is surrounded by the primary material", and "introducing the materials to be sintered into the receiving portion".

Applicants submit that the cited art fails to disclose or suggest the claimed introduction of a secondary material into an annular recess of an intermediate element which surrounds a receiving portion, which receives materials to be sintered. Accordingly, claim 22, as well as claims 23-31 that depend therefrom, are in condition for allowance over the cited art.

In view of the above, it is respectfully submitted that the present application is in condition for allowance. Such action is solicited. If for any reason the Examiner feels that consultation with Applicants' attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

Respectfully submitted,

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